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| 09/480,689      | 01/11/2000  | Min-Young Heo        | 06192.0102          | 4622             |

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EXAMINER

RAO, SHRINIVAS H

ART UNIT PAPER NUMBER

2814

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/480,689

Applicant(s)

HEO ET AL.

Examiner

Steven H. Rao

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

Applicants' amendment filed on December 30, 2003 has been entered on January 09, 2004.

Therefore claims 10-12 as recited in the preliminary amendment are currently pending in the Application.

***Information Disclosure Statement***

The information disclosure statement filed on October 28, 2003 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

A concise explanation of the relevance of the cited Chinese Patent No. 348158 of December 21, 1998 is required.

Further it is noted that Applicants' have not indicated whether the two cited references fall under category 2 a or b ( on p[age 2 of their IDS, this must be indicated .

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Bonara et al. ( U.S. Patent No. 5,570,990 herein after Bonora). ( the previous rejection is reproduced below, for response to Applicants' arguments see section below).

With respect to claim 10 Bonara describes a method for transporting a cassette comprising steps of: transporting the cassette to a port of a processing system by an automatic transfer device or a manual transfer device; ( Bonara Abstract lines 1-8,figure 15, col.11 lines 33-40) sending an automatic mode signal to the processing system if the cassette is transported by the automatic transfer device;( Bonara col. 11 lines 60-65) loading the cassette to the port automatically if the cassette is transported by the automatic transfer device or manually if the cassette is transported by the manual transfer device; ( Bonara figure 7, col. 11 lines 33-40) determine if the cassette is loaded on the port; ( Bonara figure 7 box 221) determine if the automatic mode signal is received by the processing system; ( figure 10, col. 8 lines 30-35) and performing a predetermined process if the cassette is loaded on the port and the automatic mode signal is received by the processing system or a process instructed by an operator if the cassette is loaded on the port but the automatic mode signal is not received by the processing system. ( Bonara figure 7 boxes 221, 222 etc ).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonara et al. ( U.S. Patent No. 5,570,990 herein after Bonara) as applied to claim 10 above and further in view of Hwang et al. (U.S. Patent No. 6,238,160 herein after Hwang ).

With respect to claim 11, Bonara describes the method of claim 10.

Bonara does not specifically mention the step of performing the predetermined process or the process instructed by the operator comprises a step of chucking the cassette automatically if the cassette is loaded on the port and if the automatic mode signal is received by the processing system or chucking the cassette manually if the cassette is loaded on the port but the automatic mode signal is not received by the processing system.

However Hwang in its abstract lines 3-11 describes a chucking of the wafer or the like being electro statically chucked in a processing chamber as part of the wafer, etc. transporting operations to securely hold the wafer, etc. in a fixed position within the chamber.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Hwang's chucking step in Bonora's method to securely hold the wafer, etc. in a fixed position within the chamber. ( Hwang col. 1 lines 17-18). Chucking the cassette manually if the cassette is loaded on the port but the automatic mode signal is not received by the processing system. (Hwang col. 2 lines 43-59, wherein the switches! controller e.g. 30 can be manually controlled).

With respect to claim 12 Bonara describes a method of claim 11, the step of performing the predetermined process or the process instructed by the operator further comprises steps of: reading an ID of the cassette; and checking positions and a number of substrates in the cassette. ( Bonara col. 12 lines 17-22 and 19-22).

### ***Response to Arguments***

Applicants' first contention that their invention can be distinguished from the applied Bonera reference because their invention solves the problem of errors from occurring in the process apparatus even if a cassette is transferred thereto manually , whereas allegedly Bonera's focus is on mobile loader stocker itself ( and not from preventing an error from occurring in a processing apparatus when a cassette is unexpectedly loaded on a port thereof) is not persuasive for several reasons :

(a) It is well settled law that only limitations currently recited can be given patentable weight . The limitation "preventing an error from occurring in a processing apparatus when a cassette is unexpectedly loaded on a port thereof" on which the Applicant relies are not stated in the claims. It is the claims that define the claimed invention, and it is claims , not specifications that are anticipated or unpatentable. *Constant V Advanced Micro- Devices Inc. 7 USPQ 2d 1064.*

(b) Applicants' interpretation of Bonera's teachings as being of limited focus to the mobile loader stocker is incomplete analysis of Bonera. In fact Bonera in col. 3 lines 15 to 29 states :

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Another object of the invention is to provide an efficient means for clean room operators to handle more than one SMIF pod at a time.

Another object of the present invention is to provide a mobile loader stocker with a mechanical assist for pod movement, including a positioning system for assisting the clean room operator in positioning the SMIF pod at the proper location on the SMIF port.

Another object of the present invention is to provide for a mobile loader stocker for mechanically assisting SMIF pod movement that includes a means for reducing probability of a clean room operator placing the wrong SMIF pod on the wrong SMIF port.

Therefore contrary to Applicants' allegations Bonera teaches the unrecited problem , ". preventing an error from occurring in a processing apparatus when a cassette is unexpectedly loaded on a port thereof "and its solution.

Applicants' arguments regarding figure 7 of Bonera stated on pages 3-4 of the present reply is not persuasive for reasons previously set out and incorporated here by reference for the sake of brevity.

Applicants' argument with respect to claims 11 and 12 that Hwang does not disclose /teach feature, " of performing (a) a predetermined process if the cassette is loaded on the port and the automatic mode signal is received by the processing system or (b) a process instructed by an operator if the cassette is loaded on the port but the automatic mode signal is not received by the processing system " is impermissible piecemeal analysis ( see In re Keller) of the outstanding rejection which is based on the combined teachings of Bonera and Hwang and the rejection specifically states the steps are taught as follows ( by Bonera) :

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"determine if the automatic mode signal is received by the processing system; ( figure 10, col. 8 lines 30-35) and performing a predetermined process if the cassette is loaded on the port and the automatic mode signal is received by the processing system or a process instructed by an operator if the cassette is loaded on the port but the automatic mode signal is not received by the processing system. ( Bonara figure 7 boxes 221, 222 etc ).

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Steven H. Rao whose telephone number is (571) 272-1718. The examiner can normally be reached on Monday- Friday from approximately 7:00 a.m. to 5:30 p.m.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956. The Group facsimile number is (703) 308-7724.



Steven H. Rao

Patent Examiner

March 12, 2004



LONG PHAM  
PRIMARY EXAMINER